

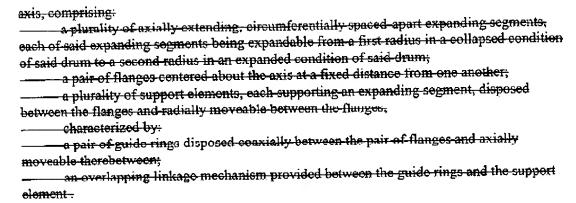
IN THE CLAIMS

Cancel claims 1-11, 12.

1. (canceled) A tire building drum having an axis and a centerplane intersecting the
axia_comprising:
a plurality of axially extending, circumferentially spaced apart expansing segments,
each of said expanding segments being expandable from a first radius-in a couapsea
condition of said drum to a second radius in an expanded condition of said drum:
a pair of flanges centered about the axis at a fixed distance from one another;
a plurality of ramp elements, each supporting an expanding segment, disposed
harvaan the flanges and radially moveable between the flanges;
at least one conical element disposed coaxially between the pair of flanges, axially
move the therebetween and having a tapered face;
wherein the tancred-face of the at least one conteat element engages an inner surjuce of
the ramp elements for forcing the expanding segments radially outward from the axis;
ah aya atayinad in that:
there are two conical elements, each frustroconical, disposed coaxially with their bases
facing each other; and
the inner surfaces of the ramp elements are V shaped.
2 (canceled) Tira building drum, according to claim I, wherem when me contest
elements move farther apart from one another, they urge the ramp elements radially outward
from the axia
3 (canceled) Tive building drum, according to claim 1, jurtner comprising:
ortanding radially from the axis, for radially guiding the pluratity of ramp elements.
4 (canceled) Tire building drum, according to claim 1, juriner comprising.
a plurality of hase members supporting a plurality of fixed segments;
in each flange, a second plurality of grooves for receiving opposite side edges of a th
plurality of have members.
5 (canceled) Tira building drum, according to claim 1, wherein:
the conical elements have notohes at circumfarantial poortions about the outer surjace
of their respective bases for receiving a bottom edge of the base member.
6 (amended) Tive heilding drym according to Claim I, Water Ciri
the expanding segments; ramp elements, flange and conical elements are all located
in a contex section of the drum.
7 (canceled) Tire huilding drum, according to claim 1, wherein:
hoth of the two conical elements exerts a force on each of the ramp exements:
2 (canculat) Tirabuilding drum appording to claim !, wherein:
the forces exerted by each of the two conical elements are symmetrical about the
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o / 1-1) Time hailding draw according to claim-le further comprising:
a plurality of fixed segments disposed between the pluranty of expanting segments.
10 (corneled) Tire building drum- according to claim 1; wherein
and partions of the expanding segments are contoured to have pockets for receiving
some of a tra garage laid un on the drum.
11 (canceled) Tixe hulding draw according to claim it, further comprising.
Linding month orn exerting a collapsing radial force on the ramp elements.
12. (canceled) A tire building drum having an axis and a centerplane intersecting the







- 13. (currently amended) Tirc building drum, according to claim 12 16, wherein the overlapping linkage mechanism comprises:
- a first elongate link having a one end pivotally attached to a one of the guide rings and an opposite end pivotally attached adjacent a one end of the support element; and
- a second elongate link having a one end pivotally attached to the other of the guide rings and an opposite end pivotally attached adjacent an opposite end of the support element.
- 14. (currently amended) Tire building drum, according to claim 12 13, wherein each of said first and second clongate links is movable between a generally axial position which is nearly parallel to the axis and a generally radial position which is halfway between parallel to and approximately perpendicular to the axis to selectively expand and retract said expandable segments between an expanded position and a retracted position.
- 15. (currently amended) Tire building drum, according to claim 12 16, wherein when the guide rings move closer to one another, they urge the support elements radially outward from the axis.
- 16. (currently amended) A tire building drum having an axis and a centerplane intersecting the axis, comprising:
- a plurality of axially extending, circumferentially spaced-apart expanding segments, each of said expanding segments being expandable from a first radius in a collapsed condition of said drum to a second radius in an expanded condition of said drum;
- a pair of flanges centered about the axis at a fixed distance from one another; a plurality of support elements, each supporting an expanding segment, disposed between the flanges and radially moveable between the flanges;

characterized by:

- a pair of guide rings disposed coaxially between the pair of flanges and axially moveable therebetween:
- an overlapping linkage mechanism provided between the guide rings and the support clement;

Tire building-drum, according to claim 12, further comprising:

- in each flange, a first plurality of grooves disposed on an inner surface thereof and extending radially from the axis, for radially guiding the plurality of support elements.
 - 17. (currently amended) Tire building drum, according to claim 42 16, wherein:
 - th expanding segments, support elements, flange and guide rings are all located in a



center section of the drum.

- 18. (currently amended) Tire building drum, according to claim 12 16, wherein: both of the two guide rings exerts a force on each of the support elements.
- 19. (original) Tire building drum, according to claim 18, wherein: the forces exerted by each of the two guide rings are symmetrical about the conterplane.
- 20. (currently amended) Tire building drum, according to claim 12 16, wherein: end portions of the expanding segments are contoured to have pockets for receiving components of a fire carcass being laid up on the drum.

Please enter the following:

- Tire building drum, according to claim 16, wherein: the support element is formed integrally with the corresponding expanding segment.
- 22. (new) A tire building drum having an axis and a centerplane intersecting the axis, comprising:
- a plurality of axially extending, circumferentially spaced-apart expanding segments, each of said expanding acgments being expandable from a first radius in a collapsed condition of said drum to a second radius in an expanded condition of said drum;
 - a pair of flanges centered about the axis at a fixed distance from one another;
- a plurality of support elements, each supporting an expanding segment, disposed between the flanges and radially moveable between the flanges;

in each flange, a plurality of grooves disposed on an inner surface thereof and extending radially from the axis, for radially guiding the plurality of support elements.

- 23. (new) Tire building drum, according to claim 22, wherein: the expanding segments, support elements, flange and guide rings are all located in a center section of the drum.
- 24. (new) Tire building drum, according to claim 22, wherein: end portions of the expanding segments are contoured to have pockets for receiving components of a tire carcass being laid up on the drum.